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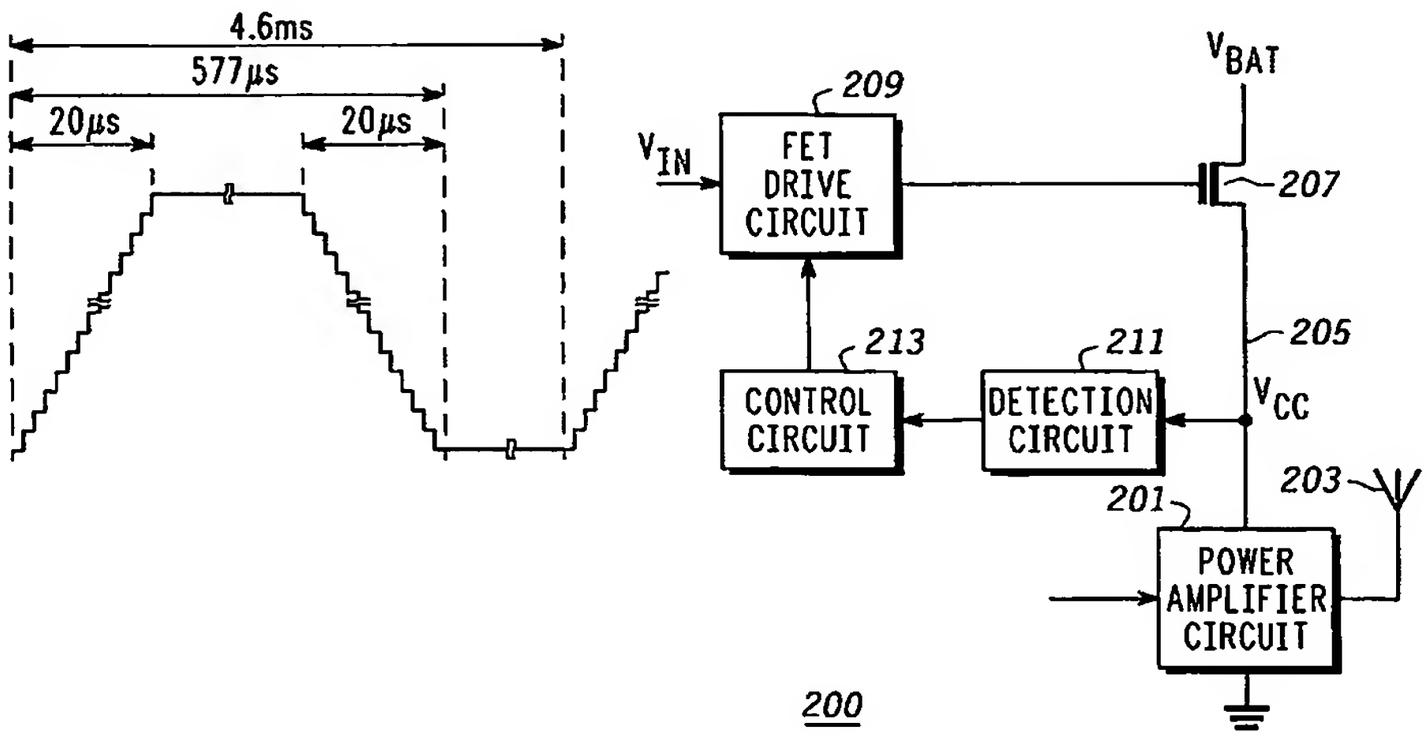
(54) Title: A POWER AMPLIFIER MODULE AND A TIME DIVISION MULTIPLE ACCESS RADIO



(57) Abstract: A power amplifier module (200) comprises a power amplifier circuit (201) having an output power level controlled by a power supply voltage. A power supply transistor (207) controls the power supply to the power amplifier circuit (201) from a drive signal which is received from a drive circuit (209). The drive circuit (209) generates the drive signal in response to a power level input signal, which specifically may correspond to a power ramping for a GSM cellular communication system. The power amplifier module (200) furthermore comprises a detection circuit (211) which determines an operating characteristic of the power supply transistor (207). The operating characteristic is preferably a saturation characteristic. A control circuit (213) controls the drive signal in response to the operating characteristic. The control circuit (213) preferably controls the drive signal such that the power supply transistor (207) does not enter the linear region for a Field Effect Transistor and the saturated region for a bipolar transistor.

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